

Title (en)
SWITCHING POWER SUPPLY, CONTROL CIRCUIT CONTROLLING SWITCHING POWER SUPPLY AND CONTROL METHOD OF SWITCHING POWER SUPPLY

Title (de)
SCHALTNETZTEIL, STEUERSCHALTUNG ZUR SCHALTNETZTEIL-STEUERUNG UND STEUERVERFAHREN FÜR EIN SCHALTNETZTEIL

Title (fr)
ALIMENTATION À COMMUTATION, CIRCUIT DE COMMANDE CONTRÔLANT L'ALIMENTATION À COMMUTATION ET PROCÉDÉ DE COMMANDE DE L'ALIMENTATION À COMMUTATION

Publication
EP 2211448 A1 20100728 (EN)

Application
EP 07831949 A 20071115

Priority
JP 2007072219 W 20071115

Abstract (en)
[DOCUMENT NAME] ABSTRACT [ABSTRACT] The present invention is a switching power supply including a first switch SW1 provided between nodes N21 and N31, a second switch SW2 provided between nodes N11 and N22, a capacitor C1 provided between the second switch and the node N22, a third switch SW3 provided between nodes N21 and N12, a delay circuit L1 that is provided between the third switch SW3 and the node N12 and delays current for charging the capacitor C1, and a first diode D1 provided between nodes N13 and N22, the first diode D1 being connected so that a cathode is located on a node N13 side.

IPC 8 full level
H02M 3/156 (2006.01); **H02M 3/158** (2006.01); **H02M 1/34** (2007.01)

CPC (source: EP US)
H02M 3/156 (2013.01 - EP US); **H02M 3/158** (2013.01 - EP US); **H02M 1/342** (2021.05 - EP US); **Y02B 70/10** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 2211448 A1 20100728; **EP 2211448 A4 20130911**; CN 101855817 A 20101006; CN 101855817 B 20121003; JP 4963724 B2 20120627; JP WO2009063561 A1 20110331; US 2010219801 A1 20100902; US 7880450 B2 20110201; WO 2009063561 A1 20090522

DOCDB simple family (application)
EP 07831949 A 20071115; CN 200780101508 A 20071115; JP 2007072219 W 20071115; JP 2009541003 A 20071115; US 77771110 A 20100511